

1. INTRODUCTION

1.1 PURPOSE

The Integrated Planning, Accountability, and Budgeting System (IPABS) is the project-based management system that supports the Environmental Management (EM) Program. IPABS supports the EM Vision to complete cleanup at most sites by 2006 by providing stable business processes focused on supporting site closure and cleanup completion. IPABS consists of two major components:

- The IPABS Handbook describes the top-level EM business processes (planning, budgeting, execution, and evaluation) and associated responsibilities necessary to fulfill the EM Vision.
- The IPABS-Information System (IPABS-IS), along with the EM Corporate Database, provides the information and reports that support the IPABS Handbook and other EM information requirements.

The IPABS Handbook implements program responsibilities established in DOE Order 430.1, *Life-cycle Asset Management* (LCAM), and consolidates and integrates applicable Office of Management and Budget (OMB), Department of Energy (DOE), and EM guidance and improvements related to program and project management, including:

- Office of Management and Budget Circular A-11, 1997 (capital asset management)
- *DOE Strategic Management System*, 1998 (Management Commitments, Performance Plans, accountability focus)
- EM Operational Expectations, 1998 (roles and responsibilities)
- *Accelerating Cleanup: Paths to Closure*, 1998 (critical path, disposition maps, programmatic risk)
- EM Budget Guidance, 1998 (integrated priority lists, new budget structure)
- EM Business Management Process Improvement Team, 1997 (project focus, project baseline summaries, systems integration, roles and responsibilities, Corporate Forum, Chief Information Officer)

Appendix A lists the major references used as input to this handbook.

IPABS is consistent with the DOE Strategic Management System, which aligns planning, budget formulation, budget execution, and evaluation with a focus on results. Figure 1 shows how the major components of IPABS mirror the DOE Strategic Management System framework.

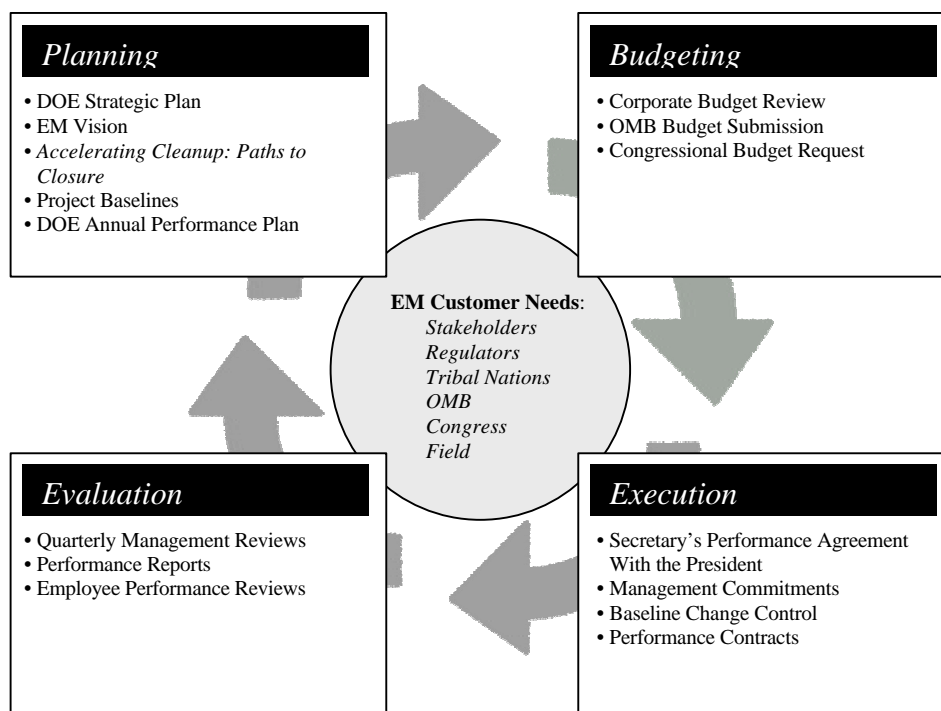


Figure 1. IPABS Overview

The IPABS Handbook addresses high-level planning, budgeting, execution, and evaluation processes and requirements and is applicable to all EM Headquarters and Field organizational elements. It defines selected performance enhancement strategies that will be used to narrow the gap between baseline funding requirements and projected outyear funding availability. The IPABS Handbook is to be used as a requirements document/guidance in conjunction with other, more detailed documents and procedures that will be developed as required to implement the high-level business processes described in the IPABS Handbook.

This document identifies EM Headquarters and Field responsibilities for implementing the business processes. It is the responsibility of the DOE Field Manager to assign responsibilities for IPABS implementation to Federal and contractor organizations. For sites with management and operations contractors, requirements for preparing IPABS-related products could be included in the annual work plan. For sites with management and integration contractors, IPABS-related products could be defined as contract deliverables. Headquarters site teams should reach agreement with Field organizations on how the policies and processes described in this handbook will be implemented on a site-specific basis.

One of the objectives of IPABS is to streamline EM program and project management systems. Appendix B identifies documents to be voided with the issuance of the IPABS Handbook.

Guidance for special requirements imposed on EM Projects and Programs by external organizations, such as OMB and Congress, to support planning, budgeting, execution, evaluation, or special initiatives, will be issued by the appropriate DOE Headquarters organization (e.g., Management and Administration [MA], Field Management [FM], Environment Safety and Health [EH]), in consultation with EM. Guidance for data reporting

requirements imposed on EM will be coordinated through the EM Chief Information Officer (CIO) to maintain consistency and to avoid duplication with other requirements.

This handbook is organized to follow the general EM business process flow. Planning is discussed in Chapter 2, Budgeting in Chapter 3, Execution in Chapter 4, and Evaluation in Chapter 5. Within these chapters, subsections are also organized to follow the general chronological business process flow. Chapter 6 discusses performance enhancement strategies used to reduce the gap between life-cycle baseline funding requirements and anticipated outyear funding. Chapter 7 discusses roles and responsibilities for IPABS implementation.

1.2 IPABS INTEGRATING ELEMENTS

IPABS includes elements that integrate the EM business processes and the EM emphasis on project management. These elements include organizing all EM work into EM Projects with an associated focus on Field project management; developing and maintaining Project Baseline Summaries (PBS) as the primary source of summary project information; using performance measures to ensure accountability; developing Life-cycle Planning and Budget Guidance; and developing and implementing the IPABS-IS and the supporting EM Corporate Database for meeting IPABS and EM information requirements. Project baselines, which also play an integrating role in IPABS, are discussed in Chapter 2 (Section 2.3.1). The following Sections describe each of these integrating elements.

1.2.1 EM Projects

The foundation of IPABS is the organization of all EM work into discrete projects, called EM Projects, which serve as the basis for planning, budgeting, execution, and evaluation at the Field and Headquarters levels. Although the exact number of Projects may vary each year, the FY 2000 Budget Guidance identifies 385 EM Projects. Each EM Project has a defined life-cycle scope, schedule, cost, and end point. By tracking progress toward each project end point, EM can clearly show how project completion contributes toward completion of site cleanup and realization of the overall EM Vision. EM takes a more comprehensive approach at organizing work into projects than is typically done by DOE, which normally recognizes only construction activity as projects. EM chooses to projectize all work, including discrete construction projects and operational projects, in order to maintain the focus on project completion and site closure and to promote rigorous project management in the planning, budgeting, execution, and evaluation of EM Projects. Although EM has projectized all of its work, only line item construction projects are required to meet departmental requirements for line item construction project management.

EM Projects should be defined to support baseline development, budget justification, project execution, and performance analysis. Each EM Project should have the following characteristics:

- Be based on an appropriate rationale to group the work and be consistent with the way the Field manages its work
- Be outcome oriented with a defined objective and/or end states (called end points at some sites), defined start and end dates, and metrics to demonstrate measurable interim progress
- Be of reasonable size (e.g., dollar value) for meaningful planning, budgeting, executing, and performance reporting
- Have an integrated scope, schedule, and cost baseline
- Have a designated DOE Field Project Manager, Contractor Project Manager, and Headquarters PBS Lead.

EM Headquarters designates selected EM Projects as High Visibility Projects in coordination with the Field. These High Visibility Projects will have an increased level of EM Headquarters involvement in planning, execution oversight, and evaluation. High Visibility Projects will be established annually. The following criteria will be used for designation of High Visibility Projects: 1) The project is recommended by the Field or Headquarters, 2) the project is critical to the success of the EM Program, 3) the project is of extraordinary stakeholder interest, and/or, 4) the project has a large total cost, large potential cost savings, or large mortgage reduction potential. A list of the current EM High Visibility Projects appears in Appendix C.

The Field is responsible for recommending how work will be organized into EM Projects. The Field has flexibility in how the EM Projects are organized into the Site Work Breakdown Structure (WBS), subject to a requirement that EM Projects be explicitly defined in the Site WBS. In some instances, the EM Projects will be at level 2 of the WBS; in other instances, EM Projects may be below a Site WBS element. EM Projects must have a WBS and a baseline in accordance with good management practices. The organization of activities and sub-projects below the EM Project will be at the discretion of the Field. The lower level of the Site WBS should support cost collection and project monitoring. Figure 2 shows the EM Project Framework and an example of the relationship between the EM Project structure and the Site WBS.

The Field Manager is responsible for developing and recommending changes to the EM Project Structure. The Assistant Secretary for Environmental Management has approval authority for the EM Project structure for each site, in coordination with the Lead Site Deputy Assistant Secretary (DAS); the DAS for Planning, Policy, and Budget; and the DAS for Site Operations. Change requests should be submitted to Headquarters by January 31 of each year. On an exception basis Headquarters will accept requests for changes to the approved project structure over the course of the year to accommodate pressing needs. Because the EM Project structure must support the budget process, EM Projects are funded from one appropriation and one budget account only. A unique budget and reporting (B&R) code is established for each EM Project. Lower level B&R codes will be established to track line item construction projects that are defined below the EM Project level.

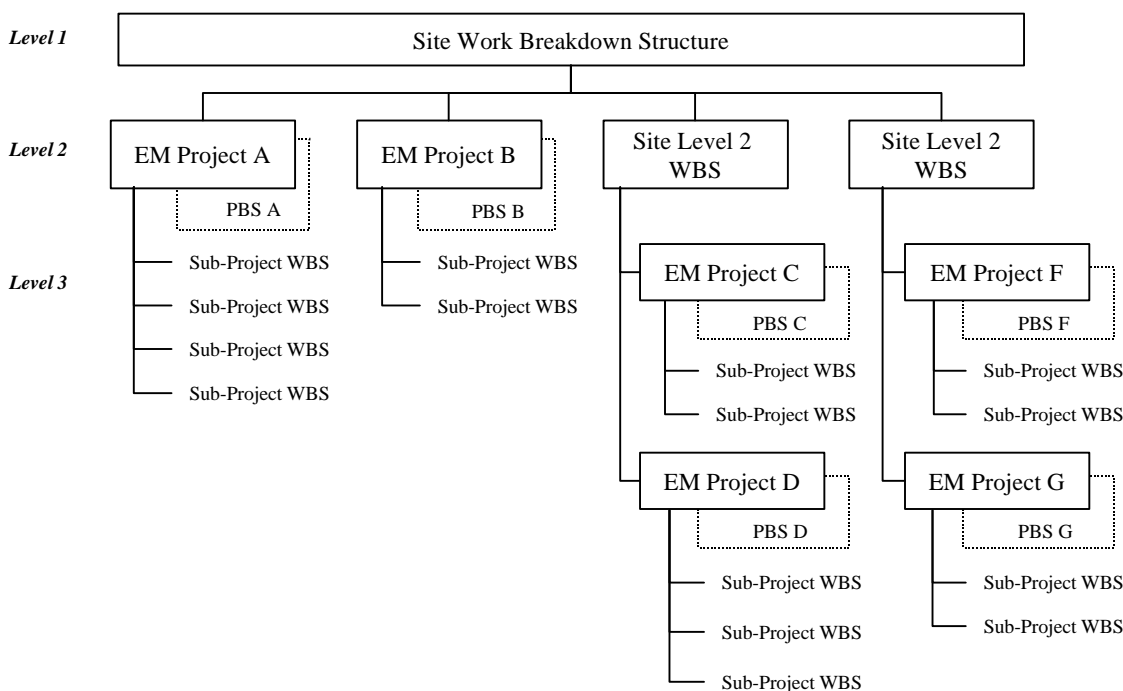


Figure 2. EM Project Framework

1.2.2 Project Baseline Summaries

A PBS shall be developed for each EM Project. The PBS is the main source of summary EM Project information needed to support planning, budgeting, execution, and evaluation. Different information in the PBS is updated on varying schedules to meet EM business process needs.

- Planning.** The PBS provides a summary of the EM Project life-cycle baseline, including project scope, technical approach, end point/end state, assumptions, interfaces with other projects, performance measures, schedule, and cost. Life-cycle baseline information in the PBS will be updated in the spring of each year to be consistent with the project baseline.
- Budgeting.** The PBS contains the necessary information to support the Federal budget process and justify the budget, including planned accomplishments, funding requirements, and performance measures associated with the funding requirements. Budget information in the PBS is typically updated in the spring and again in the fall.
- Execution.** The PBS defines EM Project execution information including planned execution year work scope, costs, and execution year management commitments, which include the EM Corporate Performance Measures and major milestones. Execution information in the PBS is typically established at the beginning of each fiscal year.

Evaluation. The PBS outlines EM Project performance information, including milestone status, actual costs, performance measures actuals, and execution/variance information. This information will be updated monthly, quarterly, or semiannually, depending on the type of data being reported.

PBSs also document information required to support other EM information requirements. For example, PBSs provide safety-related information, including project hazards and controls. PBSs also delineate technology development needs. Schedules for PBS updates to support Departmental and EM planning, budgeting, execution, and evaluation requirements are provided in the Life-cycle Planning and Budget Guidance, described in Section 1.2.4.

1.2.3 Corporate Performance Measures

EM's performance measurement process measures and demonstrates progress toward accomplishing the EM Vision, goals, and objectives. Performance measurement helps EM to assess the results of activities compared with planned goals, determine progress toward achieving the Projects' and sites' end states, and improve EM Program performance at all organizational levels. EM's corporate measures meet the requirements and intent of the Government Performance and Results Act (GPRA) and related legislation, and will be used to communicate EM's Program results to OMB, Congress, and the public.

Performance measurement provides useful information for making informed management decisions at Headquarters and in the Field, provides Congress and OMB with data to fulfill their oversight responsibilities, and keeps stakeholders apprised of EM's outcomes and results. The EM Corporate Performance Measures provide the major links between planning, budgeting, execution, and evaluation and provide a basis for establishing accountability. During planning, targets for the Corporate Performance Measures are established based on a roll-up of the performance data reported for each PBS. These same performance measures and targets are used to develop a performance-based budget and are reported in the Annual Performance Plan that is submitted to OMB and Congress with the budget. To further emphasize accountability for results, EM-1 establishes execution year Management Commitments with each Operations/Field Office Manager that are comprised of the same performance measures that are reported in the budget. Key program and project milestones are also established as part of the Management Commitments. Finally, the evaluation process assesses how well management has met their execution year commitments. Performance measures are discussed further in the planning, budgeting, execution, and evaluation chapters of this Handbook.

EM has developed a single set of Corporate Performance Measures that focus the organization on achieving EM's *Accelerating Cleanup, Paths to Closure* end states and Program outcomes, as well as on those crosscutting areas essential to accomplishing Program results effectively and efficiently (i.e., safety and health, pollution prevention, technology development, and stakeholder trust and confidence). EM's Corporate Performance Measures are presented in Appendix D. EM Headquarters is responsible for establishing the Corporate Performance Measures to be used in the EM Program.

1.2.4 IPABS Document Hierarchy

A hierarchy of documents describes the policies, processes, and procedures for efficient implementation of IPABS. OMB guidance and DOE Orders provide the framework for development of IPABS. The IPABS Handbook establishes the business processes and associated responsibilities. Figure 3 depicts the IPABS document hierarchy.

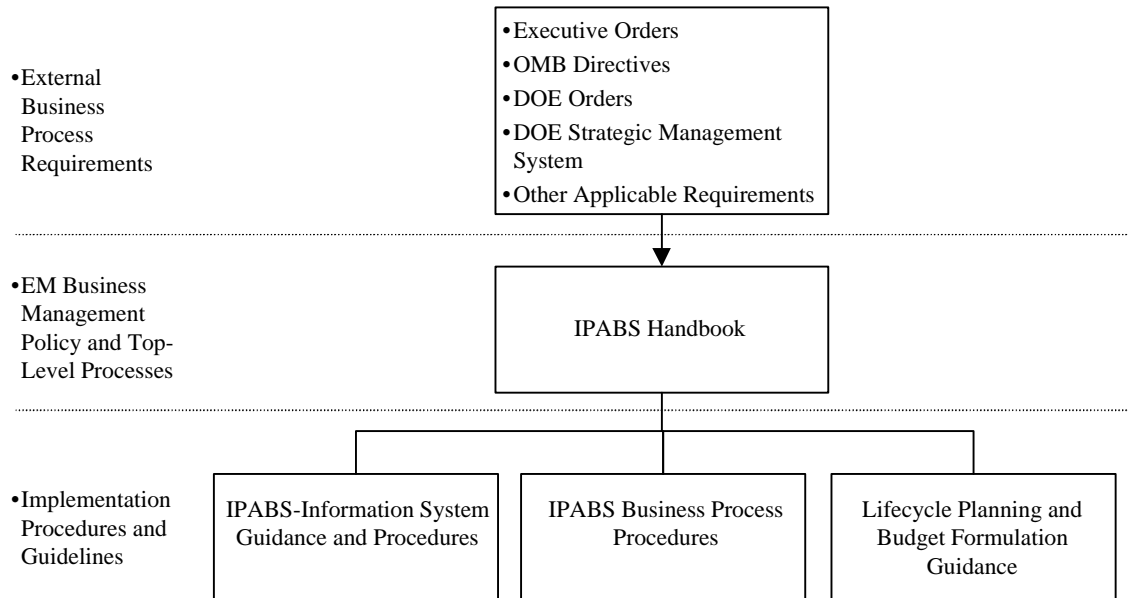


Figure 3. IPABS Document Hierarchy

The CIO will issue IPABS-IS Guidance and Procedures documents that will provide specific instructions and requirements for data reporting in support of EM business processes. The IPABS-IS Guidance and Procedures will be issued as part of the planned development and implementation of the IPABS-IS.

EM Headquarters will develop IPABS Business Process Procedures for those topics that need specific implementing procedures and guidelines. Planned topics include–

- Baseline Review
- Baseline Change Control
- Performance Reporting (Mid-Year/Year-End Reviews, Progress Reporting, Quarterly Management Reviews)
- Program Integration

In the winter of each year, Life-cycle Planning and Budget Formulation Guidance will be issued by EM-1 to support EM planning, formulation of the Chief Financial Officer's (CFO) budget, and Field reporting needs. This guidance will address all aspects of IPABS implementation and provide specific dates for each major EM business process milestone. Additional guidance to update data for the Congressional Request and to begin execution year tracking will be issued in

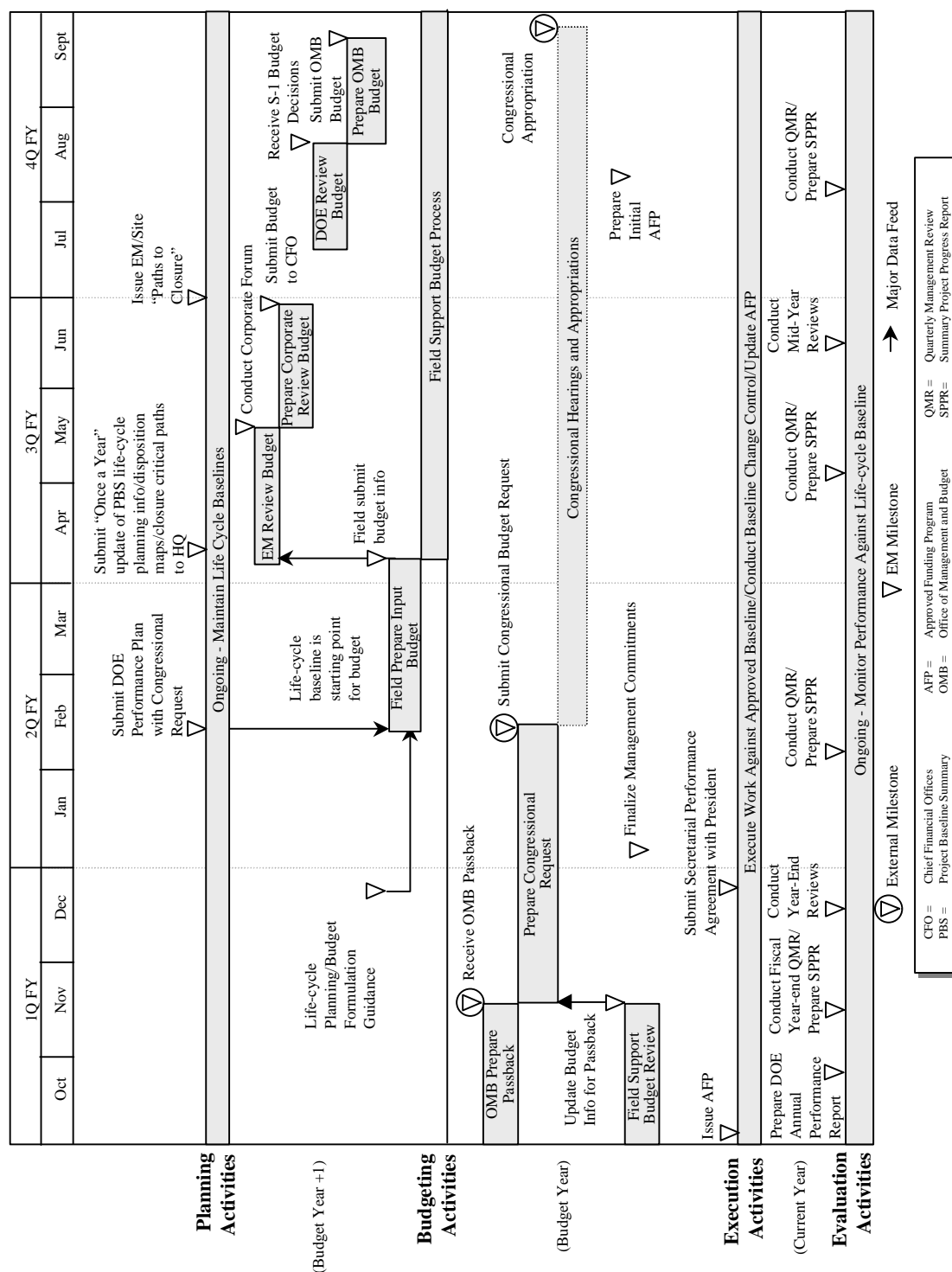


Figure 4. Major Annual EM Business Process Milestones

the fall of each year. The guidance and schedule will be integrated with the overall data update and management schedule, which will enable the Corporate Database to support EM business processes. Figure 4 presents the typical major EM business process milestones addressed by this guidance.

Appendix E identifies special program/project management requirements applicable to privatization projects.

1.2.5 IPABS-Information System

The EM CIO is developing the IPABS-IS to support the business processes in the IPABS Handbook and EM information requirements. The objectives of the IPABS-IS are to:

- Support EM's business processes, including planning, budgeting, and execution, that are integral to achieving EM's mission
- Bring timely and reliable data to the desktops of Field and Headquarters users, which is relevant to program/project management and reporting activities, and national policy
- Improve EM's ability to consistently and accurately provide information to other DOE programs, stakeholders, other Federal agencies, and Congress
- Support the replacement of current data collection processes that are duplicative, time consuming, or poorly coordinated
- Move from disconnected tools to an integrated data management tool set
- Provide a system compliant with Year 2000 requirements.

1.3 STRATEGIC SYSTEM FRAMEWORK

DOE designates Strategic Systems and Major Systems to ensure formal executive decision making consistent with the Department's strategic planning and budgeting processes. Annually, the Office of Field Management will issue a list of Strategic Systems and Major Systems to EM for updating. EM will follow the recommended thresholds outlined in DOE Notice 430.1, *Energy Systems Acquisition Advisory Board (ESAAB) Procedures*, for designating Strategic and Major Systems. A Strategic System will be designated based on Total Project Cost (TPC) of \$400 million or more, and a Major System based on TPC of \$100 to \$400 million. Traditionally, these thresholds are applied against line item construction projects. In addition to TPC, Strategic System and Major System designation shall consider risk factors, international implications, stakeholder interest, and/or national security. Any other EM Project may be selected as a Strategic System by the Secretary of Energy or as a Major System by EM-1. For designated Strategic and Major Systems, EM will follow requirements for critical decision approval, baseline change control, and status reporting as outlined in DOE Notice 430.1 and the *Joint Program Office Direction on Project Management*. Appendix F is a listing of proposed Strategic/Major Systems for FY 1999.